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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/909,039 | 07/19/2001 | Jarmo Makinen | 59643.00128 | 8466 |

32294 7590 03/28/2007
SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

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| EXAMINER |
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DANIEL JR, WILLIE J

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| ART UNIT | PAPER NUMBER |
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2617

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/28/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|--|---|--|--|
| <p align="center">Office Action Summary</p> | <p>Application No.</p> <p>09/909,039</p> | <p>Applicant(s)</p> <p>MAKINEN ET AL.</p> | |
| | <p>Examiner</p> <p>Willie J. Daniel, Jr.</p> | <p>Art Unit</p> <p>2617</p> | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-30 and 33-37 is/are allowed.
- 6) ☒ Claim(s) 31 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| <p>1) <input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|---|

DETAILED ACTION

1. This action is in response to applicant's communication filed on 27 December 2006. **Claims 12-37** are now pending in the present application and **claims 1-11** have been canceled. This office action is made **Final**.

Claim Objections

2. **Claim 12** is objected to because of the following informalities:
 - a. Claim 12 recites the limitation "...of **the** transmission power..." in line(s) 7 of the claim. The Examiner interprets as -- of **a** transmission power-- and suggests replacing said limitation to have proper antecedent and help clarify the claim language.

Appropriate correction is required.

3. This list of examples is not intended to be exhaustive. The Examiner respectfully requests the applicant to review all claims and clarify the issues as listed above as well as any other issue(s) that are not listed.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 31-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 31-32 are drawn to a "...computer program..." (descriptive material) *per se* and considered non-statutory subject matter.

- a. **Claims 31-32** include the limitation "...computer program..." as recited in line(s) 1 of claim 31. The claim lacks a proper preamble necessary to establish a statutory computer program claim. For example, the claims failed to include language such as --to perform, **a method comprising**-- that establishes a process being performed.

In view of above, the Examiner recommends that the applicant clarify the claim language as supported by the specification. As a result, the language of the claim(s) raises a question as to whether the claim is directed merely to an abstract idea that does not result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter. Furthermore, in view of the amendments, **claims 31-32** include the limitation "...a computer readable medium..." as recited in line(s) 1-2 of claim 31. The Examiner requests clarification as to what constitutes the "...medium..." as recited in the claims. The applicant is advised to review the subject matter of the specification (see pg. 5, lines 15-17; pg. 7, lines 9-11,21-23; pg. 8, lines 4-5,29-32; pg. 10, lines 4-13), which basically describes an algorithm. The Examiner respectfully requests the applicant to

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provide page(s), line(s), and figure(s) of the instant application that supports the limitation of the claim(s) and/or any supportive comment(s) to help clarify and resolve this issue(s).

See MPEP § 2106.IV.B.1(a). [Data structures not claimed as **embodied in computer-readable media** are descriptive material per se and are not statutory because they are **not capable of causing functional change in the computer**. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures **do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention** which permit the data structure's functionality to be realized.]

5. This list of examples is not intended to be exhaustive. The Examiner respectfully requests the applicant to review all claims and clarify the issues as listed above as well as any other issue(s) that are not listed.

Allowable Subject Matter

6. Claims 12-30 and 33-37 allowed.

Reasons For Allowance

7. The following is an examiner's statement of reasons for allowance:

- a. **Claims 12-30 and 33-37** are allowed in view of applicant's amendment and accompanying remarks.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

8. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with.

See 37 CFR 1.111(b) and MPEP § 707.07(a).

Response to Arguments

9. Applicant's arguments with respect to claims 31-32 have been considered but are moot in view of the new ground(s) of rejection necessitated by the amended language and new claims.

In response to applicant's arguments, the Examiner respectfully disagrees and to further clarify (see the above claims and comments in this section).

10. Furthermore, as part of this response section, 35 U.S.C. 101 is considered applicable as below. See MPEP for pertinent text of 35 U.S.C. § 101.

Claims 31-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 31-32 are drawn to a "...computer program..." (descriptive material) *per se* and considered non-statutory subject matter.

- a. **Claims 31-32** include the limitation "...a computer readable medium..." as recited in line(s) 1-2 of claim 31. The Examiner requests clarification as to what constitutes the "...computer readable medium..." as recited in the claims. The applicant is advised to review the subject matter of the specification (see pg. 5, lines 15-17; pg. 7, lines 9-11, 21-23; pg. 8, lines 4-5, 29-32; pg. 10, lines 4-13), which basically describes an algorithm.

In view of above, the Examiner recommends that the applicant clarify the claim language as supported by the specification. As a result, the language of the claim(s) raises a question as to whether the claim is directed merely to an abstract idea that does not result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter. The Examiner respectfully requests the applicant to provide page(s),

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line(s), and figure(s) of the instant application that supports the limitation of the claim(s) and/or any supportive comment(s) to help clarify and resolve this issue(s).

See MPEP § 2106.IV.B.1(a). [Data structures not claimed as **embodied in computer-readable media** are descriptive material per se and are not statutory because they are **not capable of causing functional change in the computer**. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures **do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention** which permit the data structure's functionality to be realized.]

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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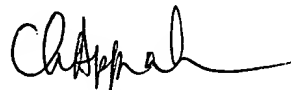
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (571) 272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WJD,JR/

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19 March 2007



CHARLES N. APPIAH
SUPERVISORY PATENT EXAMINER